

ABSTRACT

A gas cabinet assembly for dispensing of gas to a process facility such as a semiconductor manufacturing tool. A purge gas dry scrubber is integrated with the gas flow circuitry and a venturi pump in the gas cabinet. Purge gas is flowed through the flow circuitry in the gas cabinet subsequent to on-stream dispensing of process gas through such flow circuitry, and forms a purge effluent including the residual process gas. The purge effluent is flowed through a dry scrubber unit to sorptively remove the process gas species from the purge effluent. The resultant process gas-depleted purge effluent is vented from the gas cabinet, e.g., into the ducting of the house exhaust system of the process facility. Monitoring of the relative depletion of the dry scrubbing medium in the dry scrubber may be carried out with endpoint detection, e.g., using colorimetric change techniques, toxic gas monitor devices, or PLC/CPU arrangements.